

GUSTAVO GREGORUTTI**ENRICHING HIGHER EDUCATION TRAINING THROUGH VALUES AND SOCIAL ENGAGEMENT****Abstract**

The present study starts describing the relevance of university mission statements and how they have been interacting with the social demands throughout the history of higher education. This way, the recent development of a knowledge economy has strongly impacted universities that look for ways to produce and commercialize ideas (second and third missions). The increasing accreditation agencies and regional and international rankings have helped to reinforce these processes. This trend has created a situation where isomorphic mechanisms are pressing universities to align themselves with models that do not always fit a wide spectrum of them. In addition, this chapter underlines the excessive emphasis on faculty research productivity in detriment of ethic and values training that is key to have a successful professional development and an effective and well-adjusted implementation of any project. A final section discusses possible scenarios with alternative tools for administrators, who want to enrich the actual state of their universities.

Key words: higher education, mission, research, values, and ethic

A Complex Issue: University Mission

Since the beginning of unsophisticated higher education systems, knowledge, in all its multiple forms, has been a key element to support the interaction between teachers and learners. However, this is true, transmitting, not discovering, of what was accepted as science or dominant body of ideas was a central role in tertiary education. For instance, medieval institutions revolved around liberal arts with basic disciplines that were called Trivium and Quadrivium. The basic knowledge was in books with few observations of reality (Lucas, 1996). Students and professors search and research most of what was already known. This model of learning had its first serious fractures during the Renaissance when inquisitive people started going back to nature to discover its laws. The idea of measuring and controlling reality had a deep grasp in most of the great artists and nascent scientists in Florence and throughout Europe. Leonardo Da Vince is one of the most famous incarnations of the renaissance revolutionary thinking: men can control and manipulate nature (Lucas, 1996). However, universities were attached to this transmitting model for many centuries. While the modern thinkers made important contributions to sciences, it was not until the flow of new discoveries that the industrial revolution brought in during the XVIII and XIX centuries that higher education started to have deep changes. Step by step, a second mission that promoted discoveries, as an additional purpose for education, took place to enrich the mission of teaching. Brothers Humboldt made a significant impact capturing the spirit of the epoch encouraging a peculiar integration of transmitting and producing knowledge. This is also referred as the second mission for modern Universities and the first revolution of higher education (Etzkowitz, Webster & Healey, 1998). Pretty soon, the University

of Berlin, later Humboldt University,¹ became a model for producing research through students with prominent professors who chaired (cathedra) specific disciplines or fields (Veysey, 1970). This meant a significant change of paradigm that helped to further new discoveries in an increasing subdivision and specialization of knowledge. Accordingly, Humboldt University was awarded more than two dozens of Nobel Prizes between late nineteenth century and the three decades prior to the World War II (WWII). Many American Universities imitated this model and made substantial progress advancing research as a major university mission project. The University of Chicago and Johns Hopkins are two remarkable examples that followed very closely this standard. The latter one is currently the most federal funded for producing outstanding bioscience research.²

The WWII slowed down German Universities, while the American counterparts grew very quickly and expanded into a new dimension of knowledge produced in universities, namely the transferring of ideas to society that initiated the second higher education revolution. One of the main engines that sped up these changes was research done for military purposes (Altbach, Berdahl & Gumpert, 2005). The Federal Government started to fund research projects through Universities to move them from discipline-oriented research, as the Humboldtian model, toward the application of discoveries (Slaughter & Rhoades, 2004). Little by little, advanced and wealthy universities developed linkages with businesses and companies to commercialize their inventions with substantial profits for institutions and their inventors. In the United States of America (US) this trend was officially recognized and legalized through the Bayh-Dole Act (1980), allowing universities to partner with industry and government to advance research that can be potentially profitable. Nowadays, Universities may commercialize their intellectual property even if Federal funds are used for conducting research projects. Thus, industry, government, and academia joined efforts to generate lucrative knowledge that can also impact economy creating new jobs. Etzkowitz (1996) called this the "Triple Helix" interaction, to capture the trilogy of actors. This new stage of higher education is frequently called "The third mission" of higher education and its second revolution (Slaughter & Rhoades, 2004). Universities and faculty members have not only the duty of teaching and doing research, but also, through this new mission, the task of impacting and transforming society through discoveries. This model has proved to be successful for a reduced number of research-oriented institutions with plenty funding and human resources to conduct profitable and complex studies (Fielden & LaRocque, 2008).

In addition, globalization and Neoliberal policies have paved the way for the dissemination of this Triple Helix interaction that is becoming a model (Wanna-be) for most Universities, but also to governments that are promoting and funding aggressive research programs, through sets of bold policies, to compete at national and international levels (Salmi, 2007). As a natural consequence of these isomorphic processes, and in order to become relevant, rankings and quality accreditation are very much supportive of producing some kind of knowledge and transferring it to society. Everyone who wants to become visible and highly ranked with accredited programs, tries to rearrange institutional missions and policies to match these trends

¹ For more information about Humboldt University, see its website at <http://www.hu-berlin.de>.

² For more details, see <http://www.nsf.gov/statistics/infbrief/nsf10329/>.

(Gregorutti, 2011). Thus, the dissemination of this model that connects knowledge with economic development was rapidly accepted (Toakley, 2004). Emerging countries, aligned with these policies, seek ways to compete and improve their economies in an increasingly global market. In fact, the commercialization of research has gained such a prominence, that it seems to be almost a religious belief. Proof of this is the international rankings, such as The Times, QS, Shanghai, among others, which give a predominant weight to the production and transfer of knowledge to rank higher education quality. Universities must intervene in their surrounding economies and produce changes. Humanistic and social sciences, with their values, are slowly but surely put aside to allow the ones that have a direct impact in this global competition that measures most things by income and jobs (Kirwan, 2010).

In short, Universities have been accepting new missions and models to transform people and communities. No one can deny that ideas are becoming a key factor to succeed in this knowledge society and that higher education is contributing in a powerful way. However, more findings not always lead to solutions, as it may be assumed. In addition, the implementation of any change to transform a specific social issue or a technical challenge would always depend on the human factor. Particularly, is there anything that Universities should be doing to enrich students' understanding of reality and help them to develop a set of principles that would make them more successful when applying new ideas or projects?

Knowledge Is Not Enough

A central argument here is that discoveries and knowledge are not sufficient to solve society's existing problems. Information and knowledge can be used against the benefit of society. Highly educated people, without constructive values or satisfactory perception of reality, did many of the biggest frauds and scams. Alfred Nobel discovered the dynamite and it was an encouraging step forward for industrial chemistry, but almost immediately it was used to kill and steal. A similar case can be found in controlled nuclear radioactivity. The creation of knowledge without moral and social parameters can be a weapon instead of a solution.

It is essential for Universities to focus on the development of values in students' thinking. That is to say, a global understanding of moral, social, ecological, democratic, and even individual issues that may allow students and future professionals, to integrate the third mission in a society with a broad idea of what are the major problems and needs. This intentional activity can be called the development of a "well-rounded person". This broad understanding Universities should promote, is a central concept that fosters a global and practical grasp of personal and social interactions with knowledge and its impact (Peterson & Seligman, 2004). Discoveries are going to be much more effective, if they are applied taking into account all dimensions, including the human ones. Successful professionals would have an all-encompassing understanding of multiple factors and follow the best possible option that would benefit society, or a particular sector of it, as a whole. To do so, graduates must have a set of principles and values that would make them aware of the implications of their research or professional venture. An inclusive understanding of reality like this would produce a much better development of professional and disciplinary activities. This idea of a *well-rounded person* would enhance the impact a University can have on students' lives and as well as on society.

As was previously mentioned, the creation of knowledge without clear positive values is not necessarily a contribution to society. This vital mission component is not systematized by most of the existing Universities. Supporting this idea, but not associated with a particular set of beliefs, Kronman (2007) argues that the vast majority of Universities in the U.S. have lost the dimension of “meaning of life”. That is to say that they have become professional training schools disregarding other dimensions, such as moral values. According to Yang (2003), this trend is also found throughout the world. Developing wise students is probably one of the most significant contributions that nowadays a University can make to higher education, as Spanier (2010) asserts:

No matter how much brilliant research we generate, how many award-winning books we publish, and how many people we serve through outreach activities, our primary mission is the education of students. We need to continue to find new strategies to enhance student success. (p. 92)

From a secular standpoint, both public and private Universities would do well introducing what constitutes the formation of “well-rounded” students. This idea is not constrained to moral values, but also to other important social aspects such as ecology, community service, and the general use of affordable resources that will not damage nature and society. Universities must educate and counsel students to avoid spoiling their environment and communities for the pursuing of personal gain (Metcalfe & Fenwick, 2009). All this as opposite to savage capitalism practiced by many. This undertaking can be a distinctive bonus for universities in the 21st century (Spanier, 2010).

Universities need to add an ethic and moral dimension when training students to become professionals or researchers. It is not enough for students to acquire, over a period of training, a set of skill without a moral backbone that would impact their further development. This moral backbone is not intended as a set of religious beliefs, although it may include them. It is actually a rational construction of values toward a professional development with social awareness. Through a wide range of activities, studies, and experiences with communities, students establish an understanding of the world that would allow them to be professionals concerned with all the dimensions a society has. Training like this is structured to advance society in a holistic approach trying not to disrupt ecosystems, democracy, and human relationships. As Spanier (2010) declares echoing the same concern:

We need to assist students in exploring ethical issues in their professional and personal lives. I have always believed that the greatest challenges we face in higher education are issues of character, conscience, citizenship, and social responsibility among our students. We need to prepare our students to live in a world that does not operate like a cable news show, where people sit on opposite sides of a table and yell at each other, expressing extreme positions. Few things in this world are black and white; and we must prepare students for the gray areas where people must come to terms with decisions in the workplace, in their family life, in their community, and across borders. (p. 93)

Such training would impact deeply how knowledge is handled and implemented through, for instance, patents and commercialization. Without this moral backbone, graduates can misuse resources and even valuable discoveries.

Policy Implications

Now, what kind of strategies can be implemented to enrich and promote these interactions among students? A University with a broader scope of training should provide context and opportunities to help students to develop values that have practical impact. For that to happen, academic structures may start with the following approaches:

1. *Alternative reward systems*. Any project that would promote the development of values through activities that go beyond a class or laboratory will require extra resources and efforts. If professors are assessed and promoted mainly based on research productivity, anything that is not related to publishing and external funding will not succeed on the long run. The solution is not one versus the other, but an integration that would complement each other. Thus, institutions should provide time and resources needed to carry innovative approaches to these issues.

2. *University-communities-service*. If a University wants to instill social and civic values in students, it would then need to promote a proactive agenda of community engagement. Many American Universities³ are providing organizations and resources to help students to have a more realistic understanding of surrounding communities. This way, institutions can also reach out and transfer, in multiple ways, the wealth of knowledge available impacting on social and economical issues.

3. *University-service-learning*. Similarly, connecting students with real-life-problems is a powerful tool to improve learning.⁴ As it was already mentioned, some Universities in the American context are implementing different strategies to advance knowledge and learning. Studying issues with practical involvement may improve understanding and relevance of scientific knowledge.

4. *Curricular spaces to rethink values*. Universities need to make room for disciplinary discussions about the purpose of one's career. What kind of contribution for life and society will the graduates do in their fields of expertise? In other words, what is their legacy? Responses to these basic questions have the potential to enrich higher education outcomes.

5. *New proposals*. Universities will be enhanced if new mission elements are included through a collegial discussion. This is very important to give a more colorful spectrum of purposes with an increasing set of nuances that would allow Universities to overcome reductionist approaches such as rankings, but more important, accomplishing a richer set of multiple missions. According to Furco and Moely (2012), innovation will require some level of institutionalization to structure durable changes.

These few strategies can make discoveries much more effective, because they may be applied taking into account all dimensions including the human ones. Successful professionals would have an all-encompassing understanding of multiple factors and follow the best possible option that would benefit society, or a particular

³ The presidents of Brown, Georgetown, and Stanford Universities and the president of the Education Commission of the States created Campus Compact in 1985. Its main mission is to provide tools and organization for colleges and University to engage in communities to improve them.

⁴ Service Learning differentiates from Community Engagement in that it integrates curricular activities that impact learning as part of students' progress to become a professional. Wade and Demb (2009) defined it "as a course-based, reflective educational experience where an organized service activity meets community needs while developing students' academically-based skills and knowledge" (p. 7).

sector of it, as a whole. To do so, graduates need a set of principles and values to make them aware of the implications of their research or professional venture. This is a well-rounded person with a global understanding of reality that can produce a much better development of professional and disciplinary activities enhancing the impact Universities have on students' lives as well as on society.

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